AMENDMENTS TO THE CLAIMS

Claim 1. (Currently amended) A formulation of thermostable DNA polymerase comprising at least one thermostable DNA polymerase lacking 3'-exonuclease activity and at least one thermostable DNA polymerase exhibiting 3'-exonuclease activity wherein the ratio of DNA polymerase activity of the at least one polymerase lacking 3'-exonuclease activity to DNA polymerase activity of the at least one polymerase exhibiting 3'-exonuclease is ~~greater than 1 to 1.~~ from about 100:1 up to about 600:1.

Claim 2. (Currently amended) A formulation of thermostable DNA polymerase comprising at least one thermostable DNA polymerase lacking 3'-exonuclease activity and at least one thermostable DNA polymerase exhibiting 3'-exonuclease activity wherein the ratio of DNA polymerase activity of the at least one polymerase lacking 3'-exonuclease activity to DNA polymerase activity of the at least one polymerase exhibiting 3'-exonuclease activity is greater than 1 to 1 and wherein the at least one thermostable DNA polymerase lacking 3'-exonuclease activity is selected from the group consisting of Klentaq-291 and Klentaq-278.

Claim 3. (Cancelled)

Claim 4. (Currently amended) A formulation of DNA polymerase as set forth in claim 1 ~~comprising at least one DNA polymerase which lacks 3'-exonuclease activity, and at least one DNA polymerase which exhibits 3'-exonuclease activity~~ wherein the at least one DNA polymerase which exhibits 3'-exonuclease activity is ~~selected from the group consisting of~~ an Archaebacterial DNA polymerase ~~and wherein the ratio of DNA polymerase activity of the at least one polymerase which lacks 3'-exonuclease activity to DNA polymerase activity of the at least one polymerase which exhibits 3'-exonuclease activity is at least 4:1~~.

Claim 5. (Previously presented) A formulation of DNA polymerase as set forth in claim 4 wherein the Archaebacterial DNA polymerase is selected from the group consisting of a Pyrococcus furiosus DNA polymerase, a Thermococcus litoralis DNA polymerase, and a combination thereof.

Claim 6. (Previously presented) A formulation of DNA polymerase as set forth in claim 5 wherein the Archaebacterial DNA polymerase is a Pyrococcus furiosus DNA polymerase and wherein the ratio of DNA polymerase activity of the at least one polymerase which lacks 3'-exonuclease activity to DNA polymerase activity of the at least one polymerase which exhibits 3'-exonuclease activity is from about 150:1 to about 170:1.

Claims 7-9. (Canceled)

Claim 10. (Currently amended) A formulation of DNA polymerase as set forth in claim 4 wherein the at least one polymerase which lacks 3'-exonuclease activity is selected from the group consisting of a wild-type Thermus aquaticus DNA polymerase and a mutein of a Thermus aquaticus DNA polymerase from which the N-terminal 3 amino acids have been deleted, wherein the at least one polymerase which lacks 3'-exonuclease activity is a Pyrococcus furiosus DNA polymerase, and wherein the ratio of DNA polymerase activity of the at least one polymerase which lacks 3'-exonuclease activity to DNA polymerase activity of the at least one polymerase which exhibits 3'-exonuclease activity is from ~~about~~ 10:1 to about 15:1.

Claim 11. (Previously presented) A formulation of DNA polymerase as set forth in claim 5 wherein the at least one Archaebacterial DNA polymerase which exhibits 3'-exonuclease activity is selected from the group consisting of a Thermus flavus DNA polymerase and a Thermus thermophilus DNA polymerase.

Claims 12-16. (Cancelled)

Claim 17. (Currently amended) A method ~~as set forth in claim 14~~ for amplifying a nucleic acid, comprising:

preparing a composition comprising a DNA polymerase comprising at least one thermostable DNA polymerase which lacks 3'-exonuclease activity, at least one thermostable DNA polymerase which exhibits 3'-exonuclease activity, and a nucleic acid comprising a sequence to be amplified, wherein the ratio of DNA polymerase activity of the at least one thermostable DNA polymerase which lack 3'-exonuclease activity to DNA polymerase activity of the at least one thermostable DNA polymerase which exhibits 3'-exonuclease activity from about 100:1 up to about 600:1; and

wherein the nucleic acid sequence to be amplified is a nucleic acid sequence 6 kb or more in length[.]

subjecting the composition to conditions effective for amplifying the nucleic acid sequence.

Claim 18. (Currently amended) A method as set forth in claim ~~14~~ 17 wherein the nucleic acid sequence to be amplified is a nucleic acid sequence 8.4 kb or more in length.

Claim 19. (Currently amended) A method as set forth in claim ~~14~~ 17 wherein the nucleic acid sequence to be amplified is a nucleic acid sequence 15 kb or more in length.

Claim 20. (Currently amended) A method as set forth in claim ~~14~~ 17 wherein the composition further comprises an oligonucleotide primer or primers, wherein at least one primer is itself a product of a PCR amplification.

Claim 21. (Currently amended) A method ~~as set forth in claim 14~~ for amplifying a nucleic acid, comprising:

preparing a composition comprising a DNA polymerase comprising at least one thermostable DNA polymerase which lacks 3'-exonuclease activity, at least one thermostable DNA polymerase which exhibits 3'-exonuclease activity, and a nucleic acid comprising a sequence to be amplified, wherein the ratio of DNA polymerase activity of the at least one thermostable DNA polymerase which lack 3'-exonuclease activity to DNA polymerase activity of the at least one thermostable DNA polymerase which exhibits 3'-exonuclease activity exceeds 1 to 1; and wherein the nucleic acid sequence to be amplified is a nucleic acid sequence 6 kb or more in length wherein the conditions effective for amplifying the nucleic acid sequence comprise conditions effective for denaturing the nucleic acid sequence, and wherein the denaturing has a duration of less than 20 seconds

Claim 22. (Previously presented) A method as set forth in claim 21 wherein the denaturing has a duration of less than 5 seconds.

Claims 23-24 (Cancelled)

Claim 25. (Previously presented) A formulation of DNA polymerase as set forth in claim 4 wherein the at least one polymerase which lacks 3'-exonuclease activity is a Thermus thermophilus DNA polymerase.

Claim 26. (Previously presented) A formulation of thermostable DNA polymerase as set forth in claim 1 wherein the at least one thermostable DNA polymerase lacking 3'-exonuclease activity comprises at least one thermostable DNA polymerase which in wild-type form lacks any 3'-exonuclease activity.

Claims 27-30. (Cancelled)

Claim 31. (Previously presented) A formulation of DNA polymerase in accordance with claim 5, wherein the at least one polymerase which lacks 3'-exonuclease activity is selected from the group consisting of a 3'-exonuclease-negative mutant form of a DNA polymerase which exhibits 3'-exonuclease activity, a Thermus aquaticus DNA polymerase, a Thermus flavus DNA polymerase, a Thermus thermophilus DNA polymerase and a combination thereof.

Claim 32. (Currently amended) A composition comprising at least one DNA thermostable polymerase lacking 3'-exonuclease activity and at least one thermostable DNA polymerase exhibiting 3-exonuclease activity, wherein the ratio of the at least one DNA polymerase lacking 3'-exonuclease activity to the at least one polymerase exhibiting 3'-exonuclease activity is ~~greater than 1:1~~ from about 100:1 up to about 600:1 by weight.

Claim 33. (Currently amended) A composition in accordance with claim 32, wherein the ratio of the at least one DNA polymerase lacking 3'-exonuclease activity to the at least one polymerase exhibiting 3'-exonuclease activity is at least about ~~4:1~~ 1:150 to about 1:170 by weight.